

**Material Safety Data Sheet**

acc. to ISO/DIS 11014

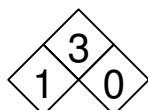
Printing date 01/27/2009

Reviewed on 01/08/2009

**1 Identification of substance****Product details****Trade name: 5252***Application of the substance / the preparation: cleaner solvent***Manufacturer/Supplier:**

Kester  
800 W. Thorndale Ave.  
Itasca, IL 60143

Tel.(847) 297-1600  
Fax.(847) 390-9338

**Information department:****2 Hazards identification****WHMIS Hazard Symbols***B2 - Flammable liquid**D2B - Toxic material causing other toxic effects***Information pertaining to particular dangers for man and environment:***The product has to be labelled due to the calculation procedure of international guidelines.**Has a narcotizing effect.**Highly flammable.**Irritating to eyes and skin.**May cause sensitisation by skin contact.**Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.**Vapours may cause drowsiness and dizziness.***NFPA ratings (scale 0 - 4)**

Health = 1

Fire = 3

Reactivity = 0

**HMIS-ratings (scale 0 - 4)**

HEALTH	1
FIRE	3
REACTIVITY	0

Health = 1

Fire = 3

Reactivity = 0

**GHS label elements****Danger***2.6/1 - Extremely flammable liquid and vapour.*

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**Warning***3.3/2A - Causes serious eye irritation.**3.4/1 - May cause an allergic skin reaction.**3.8/3 - May cause drowsiness or dizziness.**4.1/2 - Toxic to aquatic life with long lasting effects.***Prevention:***Keep away from heat/sparks/open flames/hot surfaces. - No smoking.**Keep container tightly closed.**Ground/bond container and receiving equipment.**Use explosion-proof electrical/ventilating/lighting/ equipment.**Use only non-sparking tools.**Take precautionary measures against static discharge.**Avoid breathing dust/fume/gas/mist/vapours/spray.**Wash thoroughly after handling.**Use only outdoors or in a well-ventilated area.**Contaminated work clothing should not be allowed out of the workplace.**Avoid release to the environment.**Wear protective gloves/protective clothing/eye protection/face protection.***Response:***IF ON SKIN: Wash with plenty of soap and water.**IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.**IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.**IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.**Continue rinsing.**Call a POISON CENTER or doctor/physician if you feel unwell.**Specific treatment (see label).**If skin irritation or rash occurs: Get medical advice/attention.**If eye irritation persists: Get medical advice/attention.**Wash contaminated clothing before reuse.**In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray.**Collect spillage.***Storage:***Store in a well-ventilated place. Keep container tightly closed.**Store in a well-ventilated place. Keep cool.**Store locked up.***Disposal:***Dispose of contents/container in accordance with local/regional/national/international regulations.***3 Composition/Data on components****Chemical characterization***Description: Mixture of the substances listed below with nonhazardous additions.*

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



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**Dangerous components:**

67-63-0	propan-2-ol	Danger:  2.6/2 Warning:  3.3/2A, 3.8/3	50-100%
67-64-1	acetone	Danger:  2.6/2 Warning:  3.3/2A, 3.8/3	10-25%
	Proprietary Solvent	Warning:  2.6/3;  4.1.C/1;  3.2/2, 3.4.S/1	2.5-10%

**4 First aid measures****After inhalation:** Supply fresh air; consult doctor in case of complaints.**After skin contact:** Immediately wash with water and soap and rinse thoroughly.**After eye contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.**After swallowing:** Seek immediate medical advice.**5 Fire fighting measures****Suitable extinguishing agents:**CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.**For safety reasons unsuitable extinguishing agents:** Water with full jet**Special hazards caused by the material, its products of combustion or resulting gases:**

In case of fire, the following can be released:

**Protective equipment:** Wear self-contained respiratory protective device.**6 Accidental release measures****Person-related safety precautions:**

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

**Measures for environmental protection:**

Do not allow product to reach sewage system or any water course.

Do not allow to enter sewers/ surface or ground water.

**Measures for cleaning/collecting:**

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

**7 Handling and storage****Handling:****Information for safe handling:** Prevent formation of aerosols.**Information about protection against explosions and fires:**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

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**Storage:****Requirements to be met by storerooms and receptacles:** Store in a cool location.**Information about storage in one common storage facility:** Not required.**Further information about storage conditions:**

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

**8 Exposure controls and personal protection****Additional information about design of technical systems:** No further data; see item 7.**Components with limit values that require monitoring at the workplace:****67-63-0 propan-2-ol**

PEL	980 mg/m <sup>3</sup> , 400 ppm
REL	Short-term value: 1225 mg/m <sup>3</sup> , 500 ppm Long-term value: 980 mg/m <sup>3</sup> , 400 ppm
TLV	Short-term value: 984 mg/m <sup>3</sup> , 400 ppm Long-term value: 492 mg/m <sup>3</sup> , 200 ppm BEI

**67-64-1 acetone**

PEL	2400 mg/m <sup>3</sup> , 1000 ppm
REL	590 mg/m <sup>3</sup> , 250 ppm
TLV	Short-term value: 1782 mg/m <sup>3</sup> , 750 ppm Long-term value: 1188 mg/m <sup>3</sup> , 500 ppm BEI

**Proprietary Solvent**

WEEL	30 ppm
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**Additional information:**

PEL = Permissible Exposure Limit (OSHA)

REL = Recommended Exposure Limit (NIOSH)

TLV = Threshold Limit Value (ACGIH)

OSHA = Occupational Safety and Health Administration

ACGIH = American Conference of Governmental Industrial Hygienists

NIOSH = National Institute for Occupational Safety and Health

**Personal protective equipment:****General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

**Breathing equipment:**

When ventilation is not sufficient to remove fumes from the breathing zone, a safety approved respirator or self-contained breathing apparatus should be worn.

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**Protection of hands:**

Protective gloves

**Material of gloves:**

Nitrile rubber, NBR

Natural rubber, NR

**Penetration time of glove material:**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye protection:**

Safety glasses



Tightly sealed goggles

**9 Physical and chemical properties****General Information**

**Form:** liquid  
**Color:** According to product specification  
 colourless  
**Odor:** Mild

**Change in condition****Melting point/Melting range:** Undetermined.**Boiling point/Boiling range:** 82 °C (180 °F)**Flash point:** 13 °C (55 °F)**Ignition temperature:** 255 °C (491 °F)**Auto igniting:** Product is not selfigniting.**Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.**Explosion limits:****Lower:** 2.0 Vol %**Upper:** 12.0 Vol %**Vapor pressure at 20 °C (68 °F):** 43 hPa (32 mm Hg)**Density at 20 °C (68 °F):** 0.788 g/cm<sup>3</sup>

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## Solubility in / Miscibility with

**Water:** *Not miscible or difficult to mix.*

## Solvent content:

**Organic solvents:** 78.0 %

**Solids content:** 22.0 %

## 10 Stability and reactivity

**Thermal decomposition / conditions to be avoided:** *No decomposition if used according to specifications.*

**Materials to be avoided:** *Strong acids, strong oxidizers.*

**Dangerous reactions** *No dangerous reactions known.*

**Dangerous products of decomposition:** *No dangerous decomposition products known.*

## 11 Toxicological information

### Acute toxicity:

#### LD/LC50 values that are relevant for classification:

#### 67-63-0 propan-2-ol

Oral	LD50	5045 mg/kg (rat)
Dermal	LD50	12800 mg/kg (rabbit)
Inhalative	LC50/4 h	30 mg/l (rat)

#### Proprietary Solvent

Oral	LD50	4400 mg/kg (rat)
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#### Primary irritant effect:

*on the skin: Irritant to skin and mucous membranes.*

*on the eye: Irritating effect.*

**Sensitization:** *Sensitization possible through skin contact.*

#### Additional toxicological information:

*The product shows the following dangers according to internally approved calculation methods for preparations:*

*Irritant*

## 12 Ecological information

### Ecotoxicological effects:

**Remark:** *Toxic for fish*

### General notes:

*Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.*

*Danger to drinking water if even small quantities leak into the ground.*

*Also poisonous for fish and plankton in water bodies.*

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*Toxic for aquatic organisms***13 Disposal considerations****Product:****Recommendation:**

*Must not be disposed of together with household garbage. Do not allow product to reach sewage system.  
Disposal must be made according to official regulations.*

**Uncleaned packagings:**

**Recommendation:** *Disposal must be made according to official regulations.*

**14 Transport information****DOT regulations:**

*Hazard class: 3  
Identification number: UN1993  
Packing group: I  
Proper shipping name (technical name): FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL))  
Label: 3*

**Land transport ADR/RID (cross-border):**

*ADR/RID class: 3 Flammable liquids  
Danger code (Kemler): 33  
UN-Number: 1993  
Packaging group: II  
Description of goods: 1993 FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL))*

**Maritime transport IMDG:**

*IMDG Class: 3  
UN Number: 1993  
Label: 3  
Packaging group: II  
EMS Number: F-E,S-E  
Marine pollutant: No  
Propper shipping name: FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL))*

**Air transport ICAO-TI and IATA-DGR:**

*ICAO/IATA Class: 3  
UN/ID Number: 1993  
Label: 3  
Packaging group: II  
Propper shipping name: FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL))  
UN "Model Regulation": UN1993, FLAMMABLE LIQUID, N.O.S., 3, I  
Environmental hazards: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID*

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**15 Regulations**

USA The following information relates to product regulation specific to the USA.

**SARA (Superfund Amendments and Reauthorization Act)**

Section 355 (extremely hazardous substances):

None of the ingredient is listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

**TSCA (Toxic Substances Control Act):**

All ingredients are listed or exempt from listing.

**California Proposition 65**

Chemicals known to cause cancer:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity:

None of the ingredients is listed.

**Carcinogenicity categories**

EPA (Environmental Protection Agency)

None of the ingredients is listed.

IARC (International Agency for Research on Cancer)

Proprietary Solvent

3

NTP (National Toxicology Program)

None of the ingredients is listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

CANADA: The following information relates to product regulation specific to Canada.

**Workplace Hazardous Materials Identification (WHMIS):**

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulation (CPR) and the MSDS contains all of the information required by the CPR.

WHMIS Classification: No substances are considered a Controlled Product under WHMIS.

**EUROPEAN UNION**

The following information relates to product regulation specific to the directives of the European Union.

**Risk phrases:**

Highly flammable.

Irritating to eyes and skin.

May cause sensitisation by skin contact.

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*Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
Vapours may cause drowsiness and dizziness.*

**Safety phrases:**

*Keep out of the reach of children.*

*Avoid contact with skin and eyes.*

*Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.*

*Wear suitable gloves.*

*If swallowed, seek medical advice immediately and show this container or label.*

**16 Other information**

*The information contained herein is based on data considered accurate and is offered solely for information, consideration and investigation. Kester extends no warranties, makes no representations and assumes no responsibility as to the accuracy, completeness or suitability of this data for any purchaser's use. The data on this Material Safety Data Sheet relates only to this product and does not relate to use with any other material or in any process. All chemical products should be used only by, or under the direction of, technically qualified personnel who are aware of the hazards involved and the necessity for reasonable care in handling. Hazard communication regulations require that employees must be trained on how to use a Material Safety Data Sheet as a source for hazard information.*

**Abbreviations and acronyms:**

*ADR: Accord européen sur le transport des marchandises Dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)*

*RID: Reglement internationale concernent le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)*

*IMDG: International Maritime Code for Dangerous Goods*

*DOT: US Department of Transportation*

*IATA: International Air Transport Association*

*IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)*

*ICAO: International Civil Aviation Organization*

*ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)*

*GHS: Globally Harmonized System of Classification and Labelling of Chemicals*

*NFPA: National Fire Protection Association (USA)*

*HMIS: Hazardous Materials Identification System (USA)*

*WHMIS: Workplace Hazardous Materials Information System (Canada)*

*LC50: Lethal concentration, 50 percent*

*LD50: Lethal dose, 50 percent*